

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,096	08/26/2003	Niranjan Thirukkovalur	200210001-1	2748
22879	7590 06/21/2006	EXAMINER		
	PACKARD COMPA	BELL, B	BELL, BRUCE F	
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

1	
~	•

	Application No.	Applicant(s)			
	10/648,096	THIRUKKOVALUR, NIRANJAN			
Office Action Summary	Examiner	Art Unit			
	Bruce F. Bell	1746			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status		•			
1) Responsive to communication(s) filed on	1) Responsive to communication(s) filed on				
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.				
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) 1-40 are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 26 August 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)	<b>∆</b> □•••••••••	(DTO 442)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-7, drawn to an apparatus having a current collector for a fuel cell stack, classified in class 429, subclass 32.
  - II. Claims 8-32, drawn to method of making a fuel cell stack having a current collector layer, classified in class 29, subclass 730.
  - III. Claims 33-35, drawn to a fuel cell having one or more fuel cell stack assemblies and one or more fuel cell chambers, classified in class 429, subclass 34.
  - IV. Claims 36-38, drawn to an electronic device, classified in class 429, subclass 122.
  - V. Claims 39-40, drawn to a method of using a current collector, classified in class 429, subclass 13.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are directed to an apparatus having a current collector for a fuel cell stack and a method of making a fuel cell stack having a current collector layer, respectively. The apparatus as set forth can be made by a materially different method such as by an adhesive polymer rather than direct depositing the electrode to the current collector.

Inventions I and III are directed to an apparatus having a current collector for a fuel cell stack and a fuel cell having one or more fuel cell stack assemblies and one or

Art Unit: 1746

\_\_\_\_\_

more fuel cell chambers, respectively. The Invention I does not require that the cell stack have one or more fuel cell chambers.

Invention I and IV are directed to an apparatus having a current collector for a fuel cell stack and an electronic device, respectively. The search for the electronic device of invention IV appears to include a battery and a capacitor rather than just a fuel cell.

Invention I and V are directed to an apparatus having a current collector for a fuel cell stack and a method of using a current collector, respectively. The method of using the current collector is not required in invention I.

Invention II and III are directed to a method of making a fuel cell stack having a current collector layer and a fuel cell having one or more fuel cell stack assemblies and one or more fuel cell chambers, respectively. The method of making a fuel cell stack does not require the one or more fuel cell chambers.

Invention II and IV are directed to a method of making a fuel cell stack having a current collector layer and an electronic device, respectively. The specifics of the electronic device are directed to a fuel cell, a battery or a capacitor, whereas the method is directed to just a fuel cell stack.

Invention II and V are directed to a method of making a fuel cell stack having a current collector layer and a method of using a current collector, respectively. The method of using the current collector is not required in the method of making a fuel cell stack.

Art Unit: 1746

Invention III and IV are directed to a fuel cell having one or more fuel cell stack assemblies and one or more fuel cell chambers and an electronic device, respectively. The electronic device does not require the one or more fuel cell chambers.

Inventions III and V are directed to a fuel cell having one or more fuel cell stack assemblies and one or more fuel cell chambers and a method of using a current collector, respectively. The method of using the current collector is not required in fuel cell having one or more fuel cell stack assemblies and one or more fuel cell chambers.

Invention IV and V are directed to an electronic device and a method of using a current collector. The electronic device as set forth may be a battery or capacitor which is not required in a method for using a current collector in a fuel cell.

- 2. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 3. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
- 4. A telephone call was made to Mr. Mark Ferrell on June 13, 2006 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

Art Unit: 1746

requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296.

The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB June 13, 2006 Bruce F. Bell
Primary Examiner
Art Unit 1746